

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

Claims 1 to 13 (canceled)

Claim 14 (New): A spread spectrum signal processing apparatus for processing a correlation signal from a correlator, comprising:

a correlator for correlating a spread spectrum signal with a reference signal;

a control means for supplying each of a plurality of divided codes sequentially to said correlator as the reference signal in accordance with the order of arrangement in a spreading code, said divided codes being formed by dividing the spreading code, which has a prescribed length and is used to despread said spread signal into the divided codes; and

a signal processing means for summing a correlation signal which is output corresponding to each of the divided codes and for outputting a summed result, said signal processing means comprising a plurality of delay elements for delaying a signal by a time corresponding to a length of each of said divided codes, each of said delay elements being connected in cascade;

wherein an output of said correlator is coupled to an input of each of said delay elements and to an output of a last stage of said delay elements.

Claim 15 (New): A spread spectrum signal processing apparatus for processing a correlation signal from a correlator, comprising:

a correlator for correlating a spread spectrum signal with a reference signal;

a control means for supplying each of a plurality of divided codes sequentially to said correlator as the reference signal in accordance with the order of arrangement in a spreading code, said divided codes being formed by dividing the spreading code, which has a prescribed length and is used to despread said spread signal into the divided codes; and

a signal processing means for summing a correlation signal which is output corresponding to each of the divided codes and for outputting a summed result, said signal processing means comprising a plurality of delay elements for delaying a signal by a time corresponding to a length of each of said divided codes, each of said delay elements being connected in cascade;

wherein an output of said correlator is coupled to an input of a first stage of said delay elements; and

wherein said correlation signal is summed with a delay signal from each of said delay elements.

Claim 16 (New): The signal processing apparatus of claim 15 further comprising an adder for summing a delay signal from each of said delay elements and said correlation signal.

Claim 17 (New): A spread spectrum signal processing apparatus for processing a correlation signal from a correlator, comprising:

a correlator for correlating a spread spectrum signal with a reference signal;

a control means for supplying each of a plurality of divided codes sequentially to said correlator as the reference signal in accordance with the order of arrangement in a spreading code, said divided codes being formed by dividing the spreading code, which has a prescribed length and is used to despread said spread signal into the divided codes; and

a signal processing means for summing a correlation signal which is output corresponding to each of the divided codes and for outputting a summed result;

wherein, until a peak of said correlation signal is detected, said control means generates said divided codes of a prescribed order in the arrangement order of said spreading code among the divided codes successively; and

wherein, after a peak of said correlation signal is detected, said control means starts to generate said divided codes from the next of said prescribed order.

Claim 18 (New): The signal processing apparatus of claim 17, wherein said signal processing means comprises:

an A/D converter for converting said correlation signal into a digital signal;

a memory means for storing the digital signal from said A/D converter as data signal; and

a signal processor for summing said digital data corresponding to said each of the divided codes and for outputting the summed result, said signal processor starting summing said digital data by making reference to a time at which said control means supplies said divided code to said correlator.

Claim 19 (New): The signal processing apparatus of any one of claims 14 to 18, wherein said divided codes are constituted to have an identical length.

Claim 20 (New): The signal processing apparatus of any one of claims 14 to 18, wherein:

the correlator is a surface acoustic wave convolver; and
said divided codes have a same length as or a shorter length than an interaction length of said convolver.

Claim 21 (New): A spread spectrum communication system for performing communication using a spread spectrum signal between at least two communication equipments, at least one of said communication equipments comprising:

synchronization detecting means for performing synchronization recognition of said spread spectrum signal; and

despreading means for performing despreading on said spread spectrum signal by making reference to a synchronization recognition signal from said synchronization detecting means;

wherein either said synchronization detecting means or said despreading means a spread spectrum signal processing apparatus according to any one of claims 14 to 18.